County of San Diego Revised: January 11, 1999 Reviewed: Spring 2003 Revised: October 29, 2003

# LABORATORY ASSISTANT SENIOR LABORATORY ASSISTANT

Class No. 004330 Class No. 004351

# **DEFINITION:**

To perform laboratory support work, routine procedures and simple tests in a County laboratory; and to perform related work.

#### **DISTINGUISHING CHARACTERISTICS:**

The Laboratory Assistant is a paraprofessional class series performing a wide variety of laboratory support work in County laboratories. Positions in these classes may be allocated to laboratories performing work in the areas of agriculture, crime and forensic investigative work, public health and veterinary medicine. Laboratory Assistants reviewa wide variety of professional classes including (but not limited to): criminalist, deputy medical examiner, entomologist, plant pathologist/hematologist, public health microbiologist, veterinarian and veterinary pathologist. Laboratory Assistant differs from other paraprofessional laboratory classes such as Histology Technician in that it performs a wide variety of routine procedures, simple tests and laboratory support and housekeeping work, whereas Histology Technician is a paraprofessional class that specializes in the preparation of tissue specimens for forensic pathologists.

#### **Laboratory Assistant:**

This is the journey-level class. Under general supervision, this class is responsible for performing laboratory housekeeping, test set-up and routine tests.

# **Senior Laboratory Assistant:**

This is the lead-level class. Under general direction, this class provides functional leadership and guidance to others in the laboratory. This class is responsible for preparing and processing human, animal, or environmental specimens for testing and providing necessary glassware, media, and reagents to the Public Health Microbiologists and Pathologists.

# **EXAMPLES OF DUTIES:**

Assists criminalists, microbiologists, toxicologists, veterinary pathologists, entomologists, plant pathologists or other laboratory personnel in varied laboratory functions; prepares culture media, stains and reagents; fills tubes and bottles with specified solutions and applies identification labels; sterilizes glassware and instruments using autoclave; sets up slides for tests; labels and files microscope slides; uses a variety of computerized equipment, including a personal computer to enter and retrieve data; receives and prepares specimens for study; arranges specimens and samples on trays to be placed in incubators and refrigerators; delivers supplies and specimens to designated work areas; enters data into computers; cleans laboratory equipment, such as glassware, metal instruments, sinks, tables and test panels, using solvents, brushes and rags; mixes water and detergents or acids in containers to prepare cleaning solution according to specifications; maintains numerical control on specimens; keeps simple records; may assist with animal autopsies; may perform standardized examinations of water, if legally qualified to do so; may perform routine screening tests of urine and blood specimens by radio immunoassay and enzyme immunoassay under supervision of a Toxicologist; may process specimens utilizing thin layer chromatography procedures; may process tissue homogenates for drug screening

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purposes; may process post-mortem samples by using ultraviolet/visual spectrophotometer; may collect/pick-up specimens from field, clinics and laboratories in San Diego County and Baja, CA; may process samples for nematode determination; may prepare lab test kits and conducts simple miscellaneous laboratory related functions

### **Senior Laboratory Assistant:**

In addition to all of the duties listed above: Prepares culture media, solutions, and stains with the most complicated formulations; consults with microbiologists to resolve technical problems in media preparation; writes instructions for preparation of media, solutions, and stains; collects and tests water and sewage samples; feeds and transfers tissue culture cells; removes brain tissue from rabid animals; may provide technical guidance to Laboratory Assistants and Laboratory aides, including the assignment of their daily tasks; may train subordinate laboratory support staff in laboratory procedures including specimen handling and processing, preparation of media and solutions, operation of autoclaves, preparation of specimen mailers, cleaning and temperature monitoring of incubators, refrigerators, and freezers; orders supplies; picks up and delivers specimens and supplies in San Diego County and in Baja CA; and other related laboratory functions.

### MINIMUM QUALIFICATIONS:

Knowledge Level: T = Thorough G = General N = Not Applicable

Classification Level: I = Laboratory Assistant

II = Senior Laboratory Assistant

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T	T	Laboratory safety procedures.
T	T	Terminology and usage of laboratory equipment.
G	T	Basic laboratory equipment operation and maintenance.
G	T	Mathematical computations.
G	T	Cleaning, operation, and simple maintenance of glassware washers, autoclaves, drying ovens, plates pouring machines, pH meters, and media dispensing machines.
G	T	Preparation and labeling of media, reagents, and stains.
	G	Principals of supervision and training.
	G	Confidentiality of patient records.

## Skills and Abilities to:

The following apply to both classes:

- Speak, read, write and understand English, in order to read and understand labels, formulas, oral and written instructions.
- Prepare media, stains, and reagents, and perform drug isolation techniques.
- Read and record gauges and instrument settings.
- Use computerized equipment, including a personal computer.
- Set up and maintain laboratory equipment.

# **Senior Laboratory Assistant (in addition to the above):**

- Calculate weights, volumes, and concentrations of ingredients used in preparation of media, solutions, and stains.
- Train subordinate laboratory personnel.
- Keep records of equipment maintenance and quality control checks.
- Efficiently use a personal computer to enter and retrieve data.

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## **EDUCATION/EXPERIENCE:**

Education, training, or experience, which clearly demonstrate possession of the knowledge, skills and abilities stated above. Examples of qualifying education/experience are:

#### **Laboratory Assistant:**

- 1. Two (2) years of work experience as a laboratory aide/assistant in a clinical, public health or veterinary laboratory performing the following tasks: collecting, inspecting, preparing, wrapping, distributing, washing, drying, and sterilizing laboratory glassware, instruments, syringes, and needles, operating autoclave, ovens and glassware washers, and filing, labeling and distributing media and regents containers; OR,
- 2. Completion of college level biology I/II, or chemistry I/II from an accredited college or university. This course work must have included laboratory classes.

#### **Senior Laboratory Assistant:**

Two (2) years of experience at the level of a Laboratory Assistant in the County of San Diego; AND, completion of college level biology I/II, or chemistry I/II from an accredited college or university. This course work must have included laboratory classes.

#### License:

Agriculture/Weights and Measures Department and Public Health Laboratory

A valid California Class C driver's license, proof of automobile insurance and the ability to arrange necessary transportation for field travel is required at time of appointment and must be maintained throughout employment in this class. Employees in this class may be required to use their personal vehicle.

## **Working Conditions:**

Immunization is required to handle infectious disease materials (including rabies, typhoid fever, polio, rubella, hepatitis B, etc.), handle blood, urine and stool specimens.

Handle infectious materials, including sewage, blood, feces, urine, and specimens containing HIV and hepatitis viruses.

May remove brains from potentially rabid animals.

# **Physical Requirements:**

May lift heavy objects weighing up to 50 pounds and stand for long periods of time.

## **Background Investigation:**

Applicants must have a reputation for honesty and trustworthiness. Convictions may be disqualifying depending on the type, number, severity, and recency. Applicants will be subject to a thorough background check.